Student-Teacher Relationship in Online Class of Nepali Schools during COVID-19

Jiban Khadka

Faculty Member
Faculty of Social Sciences and Education
Nepal Open University
Manbhawan, Lalitpur
Email: jiban.khadka@yahoo.com

Abstract

In traditional or online class, student-teacher relationship plays critical role in the overall growth of the students. Following the internet-based survey of 401 students from 18 public and private schools across the country, this study explored the online class status of the students, and their academic and social relations with their teachers during COVID-19 pandemic. The literature-based questionnaire was split into two parts (student backgrounds and online class status, and relationship) and had the Cronbach's alpha .892 for the relation related items. The results of descriptive and inferential statistics indicate that the students had a high degree of academic and social relation. It is significantly difference across gender (for social relation), age, class level, school type and internet connectivity for both academic and social relations but it was insignificant across students' residing regions, caste, parents' education and the e-devices used in the online class. Based on the findings, this study advances some ways to increase active involvement of female students through inclusive participation of parents, schools and society, and to break through by supporting effective pedagogical practices and building warmth and positive online classes in establishing relation with secondary, adolescents or private school students.

Keywords: students, teachers, academic and social relation, online class, school

Introduction

This present situation differs worldwide as almost people across the world are suffered from corona virus diseases 2019 (COVID-19) in one way or the other. School or college students are physically outside the conventional educational institutions and only a limited number of students who have the access to digital technology, are taking classes in distance mode through online or other means such as TV, Radio, FM, especially in developing countries. Above 90% of the world's student population is impacted by the pandemic situation (UNESCO, 2020). In Nepali school contexts, school students including the higher education are locked down at home for nearly seven months and their academic calendar is affected. In urban area, some community or private school students have little access to online education. In author's observation of two private schools, out of nearly six hundred students only about two hundred students (33%) have taking online classes, and the remaining are either out of contact or have no access to online technology. In the schools of rural area, school students are severely affected. As reported in *The Kathmandu Post* (2020, October 27) that 72% of the people are connected to internet where only 12% of the people have broadband internet connection and a smaller number of students have access to online education. For example, as reported in the newspaper, 10% of the students has internet access at their homes in Indrawati Rural Municipality. However, these information are not enough to present the status of school students in online class that require to investigate further.

In the meantime, Ministry of Education, Science and Technology has also issued the Students' learning facilitation guidelines 2020 that has announced to provide school education through online and other alternative mode as the main stream of physical mode of education during COVID- (MOEST, 2020). This affirmative action of government in school education has paved the way for online education that requires to investigate the dynamics of traditional education such as student-teacher relationship (STR) as it is imperative, even in online class, for students' academic, social, and emotional development and also for educational environment (Sabol & Pianta, 2012). Moreover, the classroom participation of students in either conventional or online mode is also equally important and the bondage of student-teacher relation plays vital role to overall development of students (Martin, 2019; Lai & Xue, 2012; Roorda, 2012; Shewkani, 2016) that is influenced by the teachers' role to the extent. Positive STR, as stated in literature, can enhance their students' academic and social dimensions, and attract towards the (online)classes. The relation between teachers and students can be observed in many ways such as academic, social, interpersonal, psychological relations. However, it is under-explored, in online or distance setting of Nepali schools, how is the STR, specifically, in terms of academic and social STR is necessary to further investigate. From this study, the teachers, school leaders and stakeholders can be benefitted for improving the existing STR in virtual classes. Considering the crucial role of STR in the teaching-learning activities, first, this study investigates the status of the online-class and then examines the student-teacher relationship in terms of academic and social aspects. The research questions are as follows:

How is the status of online-class of students in Nepali schools during the COVID-19 pandemic? How is the academic and social relation of students with their teachers in online class in Nepali schools during the COVID-19 pandemic?

Student-Teacher Relation in Schools

All the teachers are expected to care their students, motivate them towards leaning and support for learning. The teachers need to be closure to the students and should mentoring as the facilitators. These some examples of teacher's' behavior can enhance STR that is ultimately connected to student's life. According to Thompson (1998), "The most powerful weapon available to secondary teachers who want to foster a favorable learning climate is a positive relationship with our students" (p. 6) (as cited in Boynton & Boynton, 2005). If a teacher is not favorable to a student, they don't like teachers and have less satisfaction that ultimately affect the learning achievement (Martin, 2019). This is even more crucial in this pandemic situation as the students are vulnerable, just virtually connected to their teachers and peers, and can leave the online class if they are not closuring to their teachers. Such loose connection with teacher may cause weak STR and 'negative STR increases the dropout rate of students' (Bergeron, Chouinard & Janosz, 2011).

Maintaining close and intimate STR as in traditional teaching method is necessary to develop online education (Lai & Xue, 2012). For this, STR is even more crucial in any crisis situation as the situation is unfavorable and panic to the students and others. However, it is not easy tasks to develop good STR as it is affected by several factors. Due to the diverse nature of learners by gender, age, ethnicity, language, religion, culture, geography, economic or family backgrounds, it is a complex task for teachers to keep the relation with students on balance. Furthermore, it is also influenced by many factors. Meta-analytic approach of Roorda (2012) concludes that affective STR is significantly important for all types of students by age or gender. In physical mode of education, teachers provide the foundations for the students for the adaptation in social and academic life (Shewkani, 2016). It is also found more influential and fundamental for those students who are disadvantage economic background or academically at risk. Positive STR explains the students' social involvement, motivation, respect, academic growth, social-emotional or behavioral domain (Shewkani, 2016; Fraire et al., 2013; Md Yunus et al., 2011; Caballero, 2010). From this brief review of literature, STR can be a kind of catalyst for speeding up the students' all-round development.

Dimensions of STR in Schools

STR is one of the fundamental and common to all teachers from different perspectives (Oreshkina & Greenberg, 2010). It is also effective way for engaging students in their learning and social activities as well (Roorda, 2012) and has been investigated from different perspectives. How a teacher behaves with the students or what is the focus of STR is the general

perspective to look at it. For examples, Yua and Zhub (2011) studied on two facets of STR. The first is teacher–student interpersonal behavior that includes leadership, helpful and friendly, understanding and freedom teaching styles, and another is and student– teacher interaction is continual transaction that shapes teachers' and students' interpersonal behaviors. Kolo et al. (2018) observed eight types of STR: Paternalistic, therapist, priestly, employee, collegial, contractual, entertainer-audience types and covenential that was in the continuum from authoritarian to non-authoritarian, transactional to non-transactional or ideal role of teachers. Their study showed that the most prevalent STR was authoritarian however therapist STR was necessary for students' positive academic performance. These types of relation focus on the interpersonal or socio-psychological relations. Milatz et al. (2014) revisited the original factor structure of STR scale for German-speaking schools, they used the scale with three factors: Conflict, closeness and dependency with the statements, for examples, struggle between child and teachers, fairness in treatment, child's manipulation, affiliation and warmth between child and teacher, praise and pride, sharing, reaction to teachers and similar statements that assess largely behavioral and emotional STR. Some researchers like Feldlaufer, Midgley and Eccles (1988) and Johnson et al. (1985) studied STR in terms of pedagogical caring that includes academic interest, motivation and effort, social responsibility, engagement, self-regulation, task valuing, task interest/enjoyment.

Teachers always focus on student's academic success and develop social behaviors as well. Then, the foremost duty of the teachers is to establish academic and social relation with students. The statements that encourage to get better learning achievement are included in academic relation domain, and the statements which encourage them to develop their social behaviors are counted as social relation domain. In this study, these two dimensions: academic and social relation of STR are used for the study. These are based on the literature of Caballero (2010), Modlin (2008), Sabol & Pianta (2001) and Some related literature. For examples, Caballero's (2010) one of the statements for STR is "My teacher expects me to succeed." that concerns with the students' learning achievement. Another statement is "My teacher encourages good behavior." which assess the social relation. Similarly, Modlin (2008) used survey questionnaire to assess the STR in secondary schools that assess the academic and social relations in one and the other way. In connection to academic relation, they stated "I have opportunities to ask my teachers questions about what we are learning in class." and "Most teachers recognize students for being friendly and setting a good example for others." which seems closure to students' social relation with teachers. Likely to these examples, other researchers' survey questionnaire or constructs of STR can be observed through academic and social domains of STR.

Research Methods
This study follows the quantitative research approach that used internet-based survey using convenient sample in which semi-uncontrolled instrument distribution was made (Schonlau,

Fricker & Elliott, 2002) due to the COVID-19 pandemic. However, the representation of samples is taken from the school students across the country considering ecology, school types and levels.

For data collection, a survey questionnaire in google forms was developed with the focus on academic and social dimensions for assessing the STR. In the process of tool development, similar literature such as Caballero (2010), Modlin (2008), Sabol and Pianta (2001) and similar literature were taken as the insights to construct the survey questionnaire. The questionnaire was divided into two sections that was managed in multiple choice and five-point Likert scale. In first section, 14 items that would inform about the personal and family backgrounds of the students (gender, age, caste, parents' education, class level, school type), and status of online class were managed. These statements for the first section were managed in multiple choice setting. In the second section, 37 items were listed that would assess the academic and social relation of students with their teachers. Out of them, 16 items were included to assess academic STR, and 21 items for social STR and the five scales were given as 'not at all, 'rarely', 'sometimes', 'most often' and 'always' from 1 to 5 points respectively.

For administering survey questionnaire, the questionnaire link was sent to the teachers through the social media and email accounts. In the meeting of the teachers of community schools and private schools were requested to ask their online-class students to fill up the questionnaires. Altogether, 401 students responded from 18 public and private schools across the country where 123 students did not mention their school's name.

After the collection of data, reliability of the questionnaire was tested using Cronbach's alpha that ensure the internal consistency of the items for survey. The result of Cronbach's alpha calculated form SPSS was .892 that shows the acceptable level of reliability (Cohen, Manion and Morrison, 2018). Nine statements were included for 'social relation with teachers' and eleven statements for 'academic relation with teachers' were included for the analysis as the remaining statements were found highly correlated (alpha value more than .90) and deleted from the analysis as stated by Hair et al. (2017), "Values above 0.90 (and definitely above 0.95) are not desirable because they indicate that all the indicator variables are measuring the same phenomenon and are therefore not likely to be a valid measure of the construct" (p. 112).

For the data analysis, considering the assumptions of the statistical measures (either parametric or non-parametric statistics), descriptive (percentage, mean and standard deviation and inferential statistics (t-test or Mann Whitney Test and ANOVA or Kruskal Wallis Test for hypothesis test at 5% level of significance) were used below.

Results

The concern of this study was to observe the status of online class and the students' relation with their teachers. 401 students of the secondary schools participated in the survey. Gender, age, level, school's type, castes, parent's qualification, residing region, types of e-devices used

in the online class and internet connectivity were asked to know about the status of online class and their personal and family backgrounds. The frequency and percentage are used to describe these demographic and online class related factors. Form the internet-based survey data, the results of these factors are presented in the table 1 and 2 as follows:

Table 1

Students' Personal and Family Background

Personal and Family Backgrounds	Categories	Frequency	Percentage
Gender	Male	171	42.6
	Female	230	57.4
Age	Age up to 12 years	74	18.5
	Age from 13 to 18 years	294	73.3
	Age above 18 years	33	8.2
Caste	Brahmin/Chhetri	203	50.6
	Janajati	112	27.9
	Madhesi	33	8.2
	Dalit	15	3.7
	Others	38	9.5
Parents' education	Illiterate	36	9.0
	Literate	129	32.2
	School education	98	24.4
	Higher education	121	30.2
	Not applicable	17	4.2
Class level	Basic level (up to grade 8)	121	30.2
	Secondary level (grade 9 to 12)	280	69.8
School type	Public (Community) schools	168	41.9
	Private (Institutional) schools	233	58.1

In this survey of students' online class status and student-teacher relationship, female students (= 54.7%) that is in line with the girls enrollment in basic and secondary level stated in Flash Report published by CEHRD (2018), with the age of 13 to 18 years (73.3%), Bhramin/Chhetri caste (50.6%) (so-called high caste groups and with high human development index), with the literate parents (32.2%), secondary level students of class 9 to 12 (69.8%) and students from private schools (58.1%) participated in the survey. Out of different characteristics, students from Madhesi and Dalit families (defined as marginalized for Madhesi, and minority and so-called lower caste for Dalit and caste group defined as 'underprivilege groups' by the

Constitution of Nepal 2015, age of above 18 years, without parents or parents with illiteracy had negligible participation.

Table 2

Students' Status of Online Class

Status	Categories	Frequency	Percentage
Residing regions during online class	Mountain Region	2	.5
	Hilly Region	85	21.2
	Terai Region	78	19.5
	Valley Region	236	58.9
e-Devices used in Online Class	Computer Desktop/Laptop	70	17.5
	Mobile	266	66.3
	Both Computer and Mobile	59	14.7
	Others	6	1.5
Status of Internet	Good	69	17.2
	Normal	284	70.8
	Poor	48	12.0

The online class status of the students was observed based on their residing region during COVID pandemic, e-devices used in the online class and access to internet connectivity. Further, it is further described based on their caste, school's type and parents' education that would help to specify the online class status of sub-groups of students based on their personal or social backgrounds. The table 2 shows that most of the students who took the online classes reside in valley region (58.9%) which is city/urban area and followed by illy and then terai regions. Majority of the students (66.3%) use mobile, and it is followed by computer desktop or laptop (17.5%), and 14.7% of them use both mobiles and computer desktops or laptops. Most of the students' internet connectivity was normal (70.8%), even 17.2% of them had good connectivity. However, 12% of them took class in poor access of internet connectivity.

Further, the student's background is used to analyze that who were in good, normal or poor status of online class participation. The students with poor connectivity of internet in online class were more from hilly and terai (plan) regions (23.5% and 16.5%), the students had the similar connectivity of internet (good, normal and poor) across the parents with different education level, and castes and ethnicity. Regarding the use of e-devices used in their online classes, the students with educated parents used computer desktop and laptops (18.4% of parents with school level and 24.8% of the parents with higher level of education) whereas more than 75% of the students whose parents were illiterate or literate used mobiles in their online classes.

Student-Teacher Relation in Online Class of Nepali Schools

The next concern of this study was to examine the relation of students with their teachers in online class during the COVID-19 pandemic. Two types of relations: academic and social relations were examined. Mean and Standard Deviation (SD) were used to examine the descriptive level of the relations whereas t-test across two groups and ANOVA across more than two groups were used to observe the relation of students with their teachers. Skewness and kurtosis were used to examine the distribution of the survey data on the academic and social relation. In the following table 3, the status of academic and social relations is presented:

Table 3
Students' Relations with their Teachers

Relations	N Statistic	Mean Statistic	SD Statistic	Skewness Statistic	Std. Error	Kurtosis Statistic	Std. Error
Academic Relation	401	3.57	.745	-.350	.122	-.800	.243
Social Relation	401	3.55	.862	-.403	.122	-.835	.243
Valid N (listwise)	401						

In the five-point survey questionnaire, the scales were '1' stands for 'not at all; '2' for 'rarely'; '3' for 'sometimes'; '4' for 'most often' and '5' for 'always'. From the results of table 3, the mean values in both types of relations is more than 3 (3.55 and 3.57) and slightly closure to 4 that represents the scale 'most often'. It means that the respondent students rated the items of questionnaire at the scale 'most often'. The statements with the higher frequency on 'most often' indicate that the teachers most often act in such a way that strengthens the STR. The responses also seem uniform as the SD in both variables less than one which means the there is no more inconsistency in the results. Regarding the distribution of the response-data, since these values of skewness and kurtosis in academic and social relations are -.350 and -.403, and -.800 and -.835 respectively that in both academic and social relations with the teachers lie in the interval of -1 and +1. According to Verma and Abdel-Salam (2019), the distribution of the data is said to be normally normally distributed as the values lie in the interval.

STR across the Students' Backgrounds and Online Class Status

This study examined the STR across the students' personal and family backgrounds. Students' gender, age, caste, parents' education, class level, school type and online class status are taken for the analysis of STR. STR across gender, class level, school types is analyzed using t-tests as the these variables have two categories, and ANOVA for others (age, caste, parents' education, and online class status) is used as they have more than two categories. In the case

of violation of homogeneity tests, Kruskal Wallis test is used instead of ANOVA. The results are presented below:

Table 4

Relation across their Gender, Class and School Type

Relation by Student Profile	Equal Variance assumed or Not assumed	Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Difference	95% Confidence Interval Diff. Lower	Upper
Academic Relation by Gender	*EVA	3.863	.050	1.448	399	.148	.10894	.07521	-.03892	.25680
	**EVNA			1.419	336.228	.157	.10894	.07676	-.04205	.25993
Social relation by Gender	EVA	.569	.451	2.173	399	.030	.18835	.08669	.01793	.35878
	EVNA			2.144	346.997	.033	.18835	.08786	.01555	.36116
Academic relation by class level	EVA	3.844	.051	2.972	399	.003	.23887	.08036	.08088	.39685
	EVNA			3.107	253.030	.002	.23887	.07687	.08747	.39026
Social relation by class level	EVA	6.439	.012	3.938	399	.000	.36299	.09218	.18177	.54421
	EVNA			4.175	261.875	.000	.36299	.08695	.19178	.53420
Academic relation by school type	EVA	.087	.768	2.513	399	.012	.18850	.07500	.04106	.33593
	EVNA			2.499	352.214	.013	.18850	.07543	.04014	.33685
Social relation by school type	EVA	.280	.597	3.289	399	.001	.28364	.08625	.11408	.45320
	EVNA			3.289	360.176	.001	.28364	.08623	.11406	.45322

* EVA: Equal variances assumed, ** EVNA: Equal variances not assumed

In Table 4, in the Levene's tests, if the the p-values (.050, .451, .051, .768 & .579) in gender, class level, school type are not less than .05 (level of significance) that show the variances across the groups are homogeneous but for the variances of social relation across class level, there is no homogeneous. Considering the results of Levene's tests, the results of t-test is analyzed.

Students' academic relations with their teachers is significantly difference across their class level and school type (p=.003, .012 < .05). From the mean differences, the relation is significantly better with the students of basic level or public (community) schools. However, this relation is insignificant across the gender of the students.

Regarding the social relation of students, it is significantly different across gender, class level and school type (p=.030, .000 & .001 < .05). The mean different shows that the social relation of male students, basic level or public-school students have better social relation with their teachers as compared to their respective sub-groups.

Table 5

Relation with their their Age, Castes, Parents' Education and Online Class Status

Relation	Difference	Sum of Squares	df	Mean Square	F	Sig.
Academic Relation across age groups	Between Groups	6.527	2	3.264	6.013	.003
	Within Groups	216.005	398	.543		
	Total	222.533	400			
Social Relation across age groups	Between Groups	11.782	2	5.891	8.204	.000
	Within Groups	285.796	398	.718		
	Total	297.577	400			
Academic Relation across regions	Between Groups	1.231	2	.615	1.107	.332
	Within Groups	221.302	398	.556		
	Total	222.533	400			
Social Relation across regions	Between Groups	1.803	2	.901	1.213	.298
	Within Groups	295.774	398	.743		
	Total	297.577	400			
Academic Relation across castes	Between Groups	2.152	3	.717	1.292	.277
	Within Groups	220.381	397	.555		
	Total	222.533	400			
Social Relation across castes	Between Groups	1.837	3	.612	.822	.482
	Within Groups	295.740	397	.745		
	Total	297.577	400			
Academic Relation across parents' education	Between Groups	.544	3	.181	.319	.812
	Within Groups	216.127	380	.569		
	Total	216.671	383			
Social Relation across parents' education	Between Groups	.036	3	.012	.016	.997
	Within Groups	287.259	380	.756		
	Total	287.295	383			
Academic Relation across internet status	Between Groups	6.762	2	3.381	6.236	.002
	Within Groups	215.771	398	.542		
	Total	222.533	400			
Social Relation across internet status	Between Groups	10.344	2	5.172	7.167	.001
	Within Groups	287.233	398	.722		
	Total	297.577	400			
Academic Relation across e-devices	Between Groups	1.399	2	.700	1.246	.289
	Within Groups	220.086	392	.561		
	Total	221.485	394			
Social Relation across e-devices	Between Groups	.284	2	.142	.189	.828
	Within Groups	294.643	392	.752		
	Total	294.927	394			

For the analysis of ANOVA, the cases of some sub-groups of students by their backgrounds are excluded. From the database, the cases in 'not applicable' of parents' education, 'mountain region' of the students residing regions during online class, 'Others' of e-devices used in the online class were removed as there were a few numbers of cases less than 30 is the mentioned sub-groups.

Along with employing the ANOVA, test of homogeneous was conducted. There was found significant difference across homogeneity of academic relation across caste and regions, and both academic and social relation across the internet connectivity status. For the violation of assumption of homogeneity, Kruskal Wallis test was conducted to verify the results of ANOVA that showed the results of Kruskal Wallis test in line with the results of ANOVA. From the results of table 5, out of students' personal and family backgrounds, and online status, both academic and social relation of students with their teachers is significantly different across their age and internet status as the p-values of the respective groups are less than 5% level of significance (p= .003 & .000, and .002 & .001 < .05). Remaining personal and family

backgrounds, and online class status, residing regions during online class, caste of students, parents' education and e-devices used in the online class were not significantly different factors for academic and social relations of the students with their teachers.

For significant results, post-hoc tests were used to identify the two different significant sub-groups. From the results of Tukey test for ANOVA and Bonferroni test for Kruskal Wallis test, in both academic and social relations, there was significantly poor relation of the students with the age of above 18 years (p = .003 & .003 and .000 & .001 < .05) as compared to other group-age of students. For academic relation, it was significantly better relation of those students who had good internet connectivity as compared to those who had normal and poor internet access (p= .037 & .002 < .05). For social relation, the relation of students with good and normal internet connectivity was better than those others with poor internet access (p = .001 & .022< .05).

In nutshell, the students have higher level of academic and social relation with their teachers. From the cross-group analysis, despite the better relationship, STR is significantly different across the students' some of the personal and family backgrounds, and online class status. It is significantly difference across gender (for social relation), age, class level, school type and internet connectivity for both academic and social relations. However, the STR does not significantly depend on the students' residing regions during online class, caste of students, parents' education and the e-devices used in the online class.

Discussion of the Results

The results of this study show that the academic and social relation of the students with their teachers is better. While discussing the items of the questionnaire that would assess the STR, as rated by the students, their teachers most often or always participate their students in various activities in the lessons, like video, chat, quiz, games, peer work etc., encourage them to be the best, ask about thing that they did not understand, and similar behaviors. However, their teachers rarely or sometimes view their students as an important part of the classroom which means that they do not fairly treat their students and shows the weak relation with their teachers. In social relation, their teachers most often or always contacted their parents during COVID-19 pandemic, they would care about their social well-being, and listen to what they say. Despite these all behaviors, the teachers comparatively displayed some behaviors rarely or sometimes, for examples, they rarely or sometimes strengthen their self-confidence in their ability and talents, they would not manage counseling classes about the students' health, education or social problems frequently, the students were not asking their teachers when they had anxiety or fear of COVID pandemic.

The results of this study are consistent and as well as inconsistent with other past studies. For examples, significantly better social relation of male students with their teachers in the online class contradicts to the findings of some research studies such as Xiao & Si's (2017) study.

Their study showed the female STR relation is more positive than the male students of elementary classes. For this, online class context might be the reason, for example, in Nepali patriarchal societal context, girls are supposed to be assigned to a lower social role, consider themselves to have a lower status, and consequently, they less involved in the classroom and participate less in the activities (Budhathoki, 2020).

Furthermore, in online class, students simply take class from home staying in front of their parents or around them, in such situation girls may hesitate or may have fear to interact with teachers that causes the poor the social relation with teachers. This is also supported by Ozdemir and Ozdemir (2019) that because of traditional gender roles, girls may have stress that they may face problems with school adjustment. Similarly, another reason might be the reason that was found by Baker, Lusk and Neuhauser (2012). Their study showed that a large number of cases, female students perceive the use of e-devices to be more disruptive and less appropriate compared to males.

The finding of this study is significantly difference on both academic and social STR across the levels of class (basic and secondary). The finding showed that the relation of basic level students had higher level of STR. Another finding of this study is that the STR of the student with age below 18 years is significantly lower than other age-groups of students. These two findings are consistent with each other by age or class level and in line with the past studies of Ozdemir and Ozdemir (2019), and Ibrahim and El Zaatari (2020). The students of basic level who belong to small age-group of this study had higher level of both relationship (academic and social) with their teachers. In secondary level, the students age of more than thirteen years which is adolescent period. As stated by Ibrahim and El Zaatari (2020), this period of human is to establish adult identities, and increasing work and accountability may suffer teacher–student relations. Another reason may be the expectation of teachers and performance of the students at this stage that may be incompatible that might cause comparatively poor relation with teachers at secondary level students. The longitudinal study of Ozdemir & Ozdemir (2019) have also showed that a significant percentage of the adolescents had a decline in their positive views towards teachers over time.

In this study, despite similar range of STR that exists in both community and private schools of Nepal, it is relatively higher in community schools which are poor performing schools in term of students' learning achievement (Republica, 2019, June 29). Despite the good academic performance of private schools, STR is poor in such schools. The strict discipline or unfriendly environment may cause the poor STR in private school. Nepali private schools have strict discipline and rigid teaching-learning environment as published in social or news media or other some past studies. For example, In Nepal, punishment is supposed to be necessary technique to upbringing, to facilitate learning, and it was being used most commonly in the Nepali private schools and higher secondary schools as compared to public schools (CVICT, 2004; Mishra et al., 2010; The Himalaya Times, 2016, November 24). There might be

continuation of such rigid classroom environment in virtual classes that may have several facets of unfriendly online class environment such as boring classroom, limited participation in decision making and teaching to the test that may hamper the STR (Ibrahim & El Zaatari, 2020).

This study also revealed the significant difference on STR across the status of internet connectivity. As reported in UNICEF's report, "more than two-thirds of Nepal's school students are deprived of distance learning during their school closures" (Republica, 2020, August 29). Out of one-third students form which a sample for this study was drawn. In this study, 88% of the students had either good or normal access to internet connectivity and had higher level of STR. In contrast, there was still 12% of the students' s number who had poor internet access had lower level of STR. Internet with high level of bandwidth that makes effect on their student-teacher and peer interaction that is crucial for building STR through effective communication between teacher and students, students and students, and parents and teachers that are supposed to strengthen the STR. A study of Wu and Turner (2006) showed the relationship between bandwidth access and students' interaction and behavior. In the study, they state that the negative symptoms such as anxiety and stress were found in users (learners) due to low speed of internet that adversely affect the the learners' interactions that is import part of building good relation between students and teachers.

However, the STR is insignificantly difference across their students' caste, residing during online class and parents' education that is supported by or contradict to some past studies. For example, Wanders et al. (2020) did not find any significant difference on it across parents' education. In this study, a few numbers of Madhesi, Dalit or others participated in the survey that may not be representative participation so that how they perceive the STR might not be enough to generalize the findings. Regarding the status of students' caste, in physical classroom environment, marginalized and minority students' physical presence at schools used to face discriminating behaviors in the schools that is reflected in enrollment, pass rates and drop outs (Bhattachan & Bhattachan, 2009). But, the context of this study is online class environment at distance which differ from physical classroom setting, and in which such situation such as untouchability does not occur that might be reason for insignificant results. Similarly, sub-groups of students by the use of e-devices used in the class (computer desktop/laptop, mobiles, both and others), there is no significance on STR across e-devices types that contradicts to the conclusion of a meta-analysis conducted by Sung, Chang and Liu (2016). They concluded that the overall effect of using mobile devices was better than those students using desktop computers or not-using mobiles in mobile-integration education. But, the context in this study is different, it is completely online classroom environment, they have no option of e-devices for learning. In the online classes of Nepali schools, Zooms, Google Meet, Skype are commonly used apps for the class. These apps are compatible with either desktop, laptop, mobiles that are effective in class interaction. These apps are very common to change profile,

meeting setting, join meeting, in-meeting controls, share screen controls, manage participants, chats, contacts etc. that are easy to handle in mobile or desktop/laptop computers.

Conclusion and Recommendation

This study investigated the students' online class status and their relations (academic and social) with their teachers in the class. Several past studies revealed the positive effects of student-teacher relationship for the students' academic and social or overall development.

There is continuation in the status of students' participation as in traditional classroom that the students from Bhramin/Chhetri (caste) and educated families participated in the online classes. Likely to common understanding, educated parents were able to manage computer desktops and laptop including mobile for their children however internet connectivity was not the problems of the students irrespective of parents' education and castes however there is poor connectivity in the regions of hilly and terai regions.

Considering the rationale of this study, this study surveyed the school students' relation with their teachers in online class of Nepali schools during COVID pandemic. The students who are participating in the class have better relations with their teachers that leads to the conclusion that despite the small percentage of students' participation in the online class in Nepali schools, their teachers have the competency for developing good relation with the students. Unfortunately, as in traditional classroom situation, gender seems to be still an issue to maintain the relation and remain as the cultural threats for the female students to build up good relation with their teachers however discrimination practice by caste or marginality is not significant issue in online class. Even in online platform of learning, the relation with the students with teen-age, secondary level or students of private schools did seen improved however the parents' education, castes or use of e-devices were not the significant factors for building the student-teacher relation that indicate the teachers' fairness of treating their students and their unobstructed behavior for developing the student-teacher relationship.

However, this report has restricted population representation and coverage, and standardized data collection tools, taking into account the results of this report, it is important to pay attention to some findings that will help the improvement of current online class or Nepal schools' situation. The current involvement of government and non-government agencies is not adequate to increase the active participation of female students in the class including virtual class, which could be more productivity by inclusive participation of schools, parents and society. In addition, this is also important to break through in developing the relationship with secondary, adolescent or private school students by embracing effective pedagogical practices and creating warmth and positive virtual classes.

References

Baker, W. M., Lusk, E. J. & Neuhauser, K. L. (2012). On the use of cell phones and other electronic devices in the classroom: Evidence from a survey of faculty and students. *The Journal of Education for Business*, *87*(5), 275-289. DOI: 10.1080/08832323.2011.622814

Bergeron, J., Chouinard, R. & Janosz, M. (2011). The impact of teacher-student relationships and achievement motivation on students' intentions to dropout according to socio-economic status. *US-China Education Review B 2*, 273-279.

Bhattachan, K. B. & Bhattachan, Y. K. (2009). *Caste-based discrimination in Nepal. Working Paper Series, 3 (8). India: Indian Institute of Dalit Studies.*

Boynton, M. & Boynton, C. (2005). *Educator's guide to preventing and solving discipline problems*. Association for Supervision and Curriculum Development (ASCD).

Budhathoki, S. B. (2020). Obstacles faced by girls in school. *The Rising Nepal*, 2020, September 7.

Caballero, J. A. (2010). *The effects of the teacher-student relationship, teacher expectancy, and culturally-relevant pedagogy on student academic achievement* (Doctoral Dissertation). School of Education, University of Redlands. https://pqdtopen.proquest.com/

Cadamin (2020). *Role of internet in education*. India: The Asian School. https://www.theasianschool.net/

Center for Education and Human Resource Development (CEHRD) (2018). *Flash I Report 2075*. Sanothimi: Author

Center for Victims of Torture (CVICT) (2004). *Violence against children in Nepal.* UNICEF, Nepal. https://un.info.np

Cohen, L., Manion, L. & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge Publication.

Feldlaufer, H., Midgley, C., & Eccles, J. (1988). Student, teacher, and observer perceptions of the classroom environment before and after the transition to junior high school. *Journal of Early Adolescence*, *8*(2), 133-156.

Fraire, M., Longobardi, C., Elvira Prino., L., Sclavo, E. & Settanni, M. (2013). Examining the student-teacher relationship scale in the Italian context: A factorial validity study. *Electronic Journal of Research in Educational Psychology, 11*(3), 851-882. DOI: 10.14204/ejrep.31.13068

Hair, J. F., Hult, G. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling* (PLS-SEM) (2nd ed.). Thousand Oaks, CA: Sage Publications.

Ibrahim, A. & El Zaatari, W. (2020) The teacher–student relationship and adolescents' sense of school belonging. *International Journal of Adolescence and Youth*, *25* (1), 382-395. DOI: 10.1080/02673843.2019.1660998

Johnson, D., Johnson, R., Buckman, L., & Richards, P. (1985). The effect of prolonged implementation of cooperative learning on social support within the classroom. *The Journal of Psychology*, *119* (5), 405-411.

Kolo, A. G., Baba, U. S., Babayo, A. & Wan Jaafar (2018). Investigation in to the types of teacher-student relationship in institution of learning in Yobe State, Nigeria. *Journal of Humanities and Social Science 23*(3). DOI: 10.9790/0837-2303105259

Lai E. & Xue Y. (2012) On the influence of online education on teacher-student relationship. In Luo J. (Ed.) *Soft Computing in Information Communication Technology, Advances in Intelligent and Soft Computing*, Vol. 161. Springer. https://doi.org/10.1007/978-3-642-29452-5_9

Martin, J. (2019). Building relationships and increasing engagement in the virtual classroom: practical tools for the online instructor. *Journal of Educators Online*, *16* (1). https://eric.ed.gov/

Md Yunus, M., Wan Osman, W. & Ishak, N. M. (2011). Teacher-student relationship factor affecting motivation and academic achievement in ESL classroom. *Procedia Social and Behavioral Sciences 15*, 2637–2641. https://pdf.sciencedirectassets.com

Milatz, A., Gluer, M., Harwardt-Heinecke, E., Kappler, G. & Ahnert, L. (2014). The student–teacher relationship scale revisited: Testing factorial structure, measurement invariance and validity criteria in German-speaking samples. *Early Childhood Research Quarterly*, *29*, 357–368.

Ministry of Education, Science and Technology (MOEST) (2020). *Vidhyarthi sikai sahajikaran nirdesika* 2077. Kathmandu: Autor.

Mishra, N., Thakur, K. K., Koirala, R., Shrestha, D., Poudel, R. & Jha, R. (2010). Corporal punishment in Nepalese school children: Facts, legalities and implications. *Journal of Nepal Pediatric Society, 3*(2). https://www.nepjol.info

Modlin, C. D. (2008). *Student -teacher relationships and their effect on student achievement at the secondary level* (doctoral dissertation). Walden University.

Oreshkina, M. & Greenberg, K. H. (2010). Teacher-student relationships: The meaning of teachers' experience working with underachieving students. *Journal of Pedagogy, 1*(2), 52-66. DOI 10.2478/v10159-010-0009-2

Ozdemir, S. B. & Ozdemir, M. (2019). How do adolescents' perceptions of relationships with teachers change during upper-secondary school years? *Journal of Youth and Adolescence*, *49*, 921-935. doi.org/10.1007/s10964-019-01155-3

Republica (2019, June 28). Public schools fare badly in SEE results. *RepublicaNepal*. https://myrepublica.nagariknetwork.com

Republica (2020, August 29). At least two-thirds of Nepal's schoolchildren unable to access remote learning during school closures: *ReplubiaNepal*, 2020, August 29. https://myrepublica.nagariknetwork.com

Roorda, D. L. (2012). *Teacher-child relationships and interaction processes: Effects on students' learning behaviors and reciprocal influences between teacher and child*. UvA-DARE, University of Amsterdam

Sabol, T. J. & Pianta, R. C. (2012). Recent trends in research on teacher-child relationships. *Attachment & Human Development, 14* (3). https://www.researchgate.net

Schonlau, M., Fricker, R. D. & Elliott, M. N. (2002). Conducting research surveys via E-mail and the Web. Pittsburgh, RAND. http://www.rand.org

Shewkani, R. K. (2016). Influence of student-teacher relationship on achievement. *International Journal of Educational Research Studies, II* (X).

Sung, Y., Chang, K. & Liu, T. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computer & Education, 94*, 22-275. https://doi.org/10.1016/j.compedu.2015.11.008

The Himalaya Times (2016, November, 24). *Corporal punishment rampant in schools*. KathmandU: The Himalaya Times, Nov. 24, 2016. https://thehimalayantimes.com

The Kathmandu Post (2020, October 27). *Digital divide too wide for online classes to succeed in Nepal*. https://tkpo.st/3erJV0Q

UNESCO (2020). *COVID-19 educational disruption and response: Radio Paathshala for students in Nepal's Bagmati province*. Kathmandu: Kathmandu Office.

Verma, J. P. & Abdel-Salam, A. G. (2019). *Testing statistical assumptions in research*. John Wiley & Sons, Inc.

Wanders, F. H., Dijkstra, A. B., Maslowski, R. & Veen, I. (2020) The effect of teacher-student and student-student relationships on the societal involvement of students. *Research Papers in Education*, *35* (3), 266-286. DOI: 10.1080/02671522.2019.1568529

Wu, Y. & Turner, P. (2006). The relationship of bandwidth, interaction, and performance in online courses: A study. *Online Journal of Distance Learning Administration, IX (I)*. https://www.westga.edu.

Xiao, X. & Si, W. (2017). An analysis of the factors affecting the teacher-student relationship for co-schooling Han nationality and ethnic minorities. *2017 3rd international conference on social science and technology education* (ICSSTE 2017). ISBN: 978-1-60595-437-0

Yua, T. M. & Zhub, C. (2011). Relationship between teachers' preferred teacher–student interpersonal behaviour and intellectual styles. *Educational Psychology, 31* (3). https://www.researchgate.net